REMARKS

The present Amendment amends claims 1-13. Therefore, the present application has pending claims 1-13.

Claims 1-4, 6 and 9-13 stand objected to due to various informalities noted by the Examiner in the Office Action in paragraphs 1 and 2. Various amendments were made throughout the claims so as to correct the informalities noted by the Examiner. Therefore, this objection is overcome and should be withdrawn.

Claim 1 stands rejected under 35 USC §102(e) as being anticipated by Fichou (U.S. Patent No. 5,790,522). This rejection is traversed for the following reasons. Applicants submit that the features of the present invention as now recited in claim 1 are not taught or suggested by Fichou whether taken individually or in combination with any of the other references of record. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw this rejection.

The features of the present invention as clearly recited in claim 1 are not taught or suggested by Fichou. Particularly, the present invention as recited in claim 1 is directed to an invention as illustrated in Figs. 1 and 2 of the present application wherein a packet switch is provided connected to a plurality of input lines IN-1 through IN-n and output lines OUT-1 through OUT-n for forwarding variable length packets received from each of the input lines to one of the output lines specified by respective header information included in a packet. The packet switch of the present invention as recited in claim includes a switch unit 3 having a plurality of input ports

LI-1 through LI-n and output ports LO-1 through LO-n corresponding to the input lines and output lines. The switch unit outputs fixed length cells received from each of the input ports to one of the output ports specified by routing information sustained in the cell header of the received cells. The packet switch of the present invention as recited in claim 1 further includes a plurality of input line interface 1-1 through 1-n, the details of which are illustrated in Fig. 2. Each input line interface is connected to one of the input ports, converts the variable length packets received from the input line to fixed length cells and supplies the fixed length cells, to the input port of the switch unit 3.

The packet switch of the present invention as recited in claim 1 also includes a plurality of output line interfaces 2-1 through 2-n each connected to one of the output ports of the switch unit 3. Each output line interface converts output cells received from the output port to variable length packets and sends the packet to one of the output lines.

According to the present invention as recited in claim 1 each input line interface has a cell output controller 16 which stores the cells converted from the variable length packets in queues formed for each output line according to a degree of priority of respective cells and selectively forwards the stored cells to the input port according to the degree of priority of the respective cells.

The above described features of the present invention now more clearly recited in the claims are not taught or suggested by any of the references of record particularly Fichou.

Fichou discloses a variable length packet switching node in Fig. 4 thereof including a cell switching unit (switch fabric 24), a plurality of input line interfaces (receive adaptors) each for converting variable length packets received from an input line into fixed length cells, and a plurality of output line interfaces (transmit adaptors) each for converting output cells received from the switching unit into variable length packets. As taught in Fichou each of the input line interfaces is provided with a set of input buffers (receive adaptor queues 42) corresponding to the priority level of input packets and a manager module 43 to control the traffic to be directed from the receive adaptor queues toward the switching unit 24 via a receive switch interface (RSI).

However, Fichou teaches that variable length input packets are dispatched to the receive adaptor queues and these variable length input packets are read out in the order of priority to the receive switch interface by which each variable length input packet is assembled into fixed length ATM cells. The Examiner's attention is directed to col. 3, lines 36-39 of Fichou.

Thus, according to Fichou since the priority control of input packets is carried out in variable length packet units, when a low priority packet is being assembled into ATM cells, a high priority packet arriving thereafter and stored in a receive adaptor queue has to wait until entire time period has passed where the low priority packet is assembled into ATM cells by the RSI and transferred to the switch fabric 24 as described in col. 6, lines 32-48 of Fichou. To address this problem, Fichou teaches that the current low priority packet is transferred to the switch as quickly as

possible to make way for the high priority packet. The Examiner's attention is directed to col. 7, lines 5-10 of Fichou.

The present invention as clearly recited in the claims solves the above described problem faced by Fichou in an entirely different way from that taught by Fichou. According to the present invention as, for example, illustrated in Fig. 2 of the present application each variable length input packet is converted into fixed length cells by a cell assembler 14 and stored in one of the cell queues formed in an input buffer memory 15 according to the degree of priority of the cells. In the present invention as recited in claim 1 packet transfer is performed in cell units as described on page 13, line 19 through page 14, line 11 of the present application. Thus, the present invention provides a unique advantage over that taught by Fichou being that a newly arrived high priority packet can overtake a previously arrived low priority packet at the input line interface and need not wait the time period until an assembly is performed of the low priority packet as taught by Fichou.

Therefore, Fichou fails to teach or suggest that each of the input line interfaces has a cell output controller which stores the cells converted from the variable length packets in queues formed for each output line according to a degree of priority of the respective cells and selectively forwards the stored cells to the input port according to the degree of priority of the respective cells as recited in the claims.

As is clear from the above noted passage of claim 1, each input line interface stores the converted cells in a queue according to a degree of priority and thereafter forwards the stored cells according to the degree of priority. In other words, forwarding from the input line interface to the switch is conducted based upon the

priority of the cell allow for high priority cells to be transmitted ahead of low priority cells. Such features are clearly not taught or suggested by Fichou.

Further, in this regard, the present invention as recited in the claims provides for queues in each input line interface corresponding to a degree of priority of the cells. Thus, in the present invention the cells are stored and grouped according to their respective priority so as to easily permit the cells to be forwarded from the queues based on priority as required. Such features are clearly not taught or suggested by Fichou.

Thus, based on the above, it is quite clear that the features of the present invention as now more clearly recited in the claims are not taught or suggested by Fichou. Therefore, reconsideration and withdrawal of the rejection of claim 1 under 35 USC §102(e) based on Fichou is respectfully requested.

Applicants acknowledge the Examiner's indication in paragraph 5 of the Office Action that claims 2-8 contain allowable subject matter and that claims 9-13 are allowable if the objections set forth in the Office Action have been overcome. The objections set forth in the Office Action have been overcome. Therefore, claims 9-13 are allowable.

The remaining references of record have been studied. Applicants submit that they do not supply any of the deficiencies noted above with respect to the reference utilized in the rejection of claim 1.

In view of the foregoing amendments and remarks, Applicants submit that claims 1-13 are in condition for allowance. Accordingly, early allowance of claims 1-13 is respectfully requested.

To the extent necessary, the applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (520.36997X00).

Respectfully submitted,

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